Code Mixing in Egyptian Real Estate Billboards: A Multimodal Analysis

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Abstract—**This paper investigates the strategies employed in Egyptian real estate billboards to attract potential customers. More specifically, it examines how the mixing of Arabic and English as codes, and the use of visuals and colors, are techniques that aim to enhance the sales market. The theory of Multimodality [1], as well as Linguistic Landscape [2] are used to analyze a number of real estate double billboards that are displayed in two Egyptian main routes, namely Cairo Ring Road and the Egyptian North Coast highway. Results of this research would add to the body of research in the area of multimodality and linguistic landscape. They would also shed light on the strategies used by advertisers which reflect the social identity of the community where the examined billboards are displayed.**

Index Terms—**Advertising, code mixing, multimodality, linguistic landscape.**

I. INTRODUCTION

There is no denial that advertisements are present almost everywhere we go. We live in a world where visual representation permeates our daily activities, where it is difficult to walk down a street in any city in the world and not notice the public display of abundant commercial signs. Those signs mostly include a mixture of people, pictures and printed text, often employing colors, slogans and/or offers to attract viewers to buy the advertised product. The same applies to written discourse; in this technologized age, it is rare to find a written text, including newspapers and magazines, academic texts or otherwise, without illustrations. Research in this area of multimodal discourse, though flourishing over the past few decades, can still be invigorated with more studies focusing on particular communities and different fields.

In the area of marketing, two forms of advertising are used: indoor and outdoor. The radio, TV and websites are mostly the media for indoor advertisements, while posters and billboards are used outdoors. Ref. [3] notes that research on outdoor advertising needs more attention, as studies had ignored its investigation. Advertisers probably see that the easiest and fastest way to reach people is through showing their products on TV and the radio. Yet, people can easily access information through outdoor advertising because it simply exists almost everywhere.

One aspect that impacts the way people view advertisements is the language, or code, used to attract potential consumers. Even though the language of advertising seems to be an imitation of the language people

use in their everyday life, the difference lies in the fact that advertisers preplan the language they use in billboards [4]. The preplanning could be in the decision to use one or more codes, which code(s) would be more persuasive for the audience, as well as what strategies to employ to display those codes.

The strategies employed by advertising agencies, sometimes unusual and/or unpredictable, leave an impact on potential customers by "sustaining the reader's attention; making the advertisement memorable, and prompting the reader into appropriate action" [5]. This "appropriate action", to the advertiser's mind, is for the viewer to purchase the advertised product. Ref. [6] states that by looking at billboards, we see "the image of ourselves reflected back in their words, attitudes, expressions, or actions" that are being displayed. This image is what entices viewers to act in one way rather than another. Another factor comes from Ref. [4], which maintains that "language choice in commercially driven discourses is rarely, if ever, random". The three quotations above illustrate how important every minute detail is in impacting viewers and enticing them to action, namely to purchase the advertised product.

Unlike daily interactions between interlocutors, it is difficult to predict the viewers' reaction to the products displayed on billboards. The most striking difference between face-to-face and media discourse is the fact that the latter is one-sided [7]. More specifically, in daily interactions, people alternate between being the producers and deciphers of texts. In media discourse, on the other hand, there is a clear division between the producers and "consumers" of text. This type of discourse is designed for mass audiences, and what it does is "address an ideal subject, be it viewer, listener, or reader (p. 49). In the case of billboards on highways and main routes, the audience are viewers and readers who drive, ride, or walk by the billboards; as a result, advertisers do everything possible, using memorable catch phrases, appealing colors and other interesting techniques, to attract the attention of as many passersby as possible.

The language, or code, used in a billboard is one aspect that influences potential customers. Ref. [2] states that "language is used to create group membership (us/them), to demonstrate inclusion or exclusion … or show economic status and classification of people and personal identities". The author explains that the way language items are presented conveys messages, directly or indirectly, about the power specific languages have in the community. One may assume that a country's native language would enjoy a high status, yet we find many instances of a foreign language used in advertising, which raises questions about the nature of the potential customers such advertising targets [8]. The Egyptian community, which has witnessed proliferation in

the use of English by the educated and less educated alike, especially in oral discourse, has made use of mixing the native language, Arabic, with a foreign language, English, in different life domains. We find road signs, restaurants, supermarkets, beauty salons and big shopping centers using announcements in Arabic and English, if not English only. The use of English is sometimes a translation of the Arabic version, while other times it complements the information given in Arabic. At other times, still, a combination of Arabic and English is used. This tendency to use codeswitching, whether intra or inter-sententially, according to research, appeals to bilinguals who are proficient in two languages [9]. Those bilinguals can usually use codeswitching within the same sentence at an advanced, complex level.

The different languages used in signs or billboards helps explain "the linguistic and cultural diversity of the ethnolinguistic groups" inhabiting a particular community (p.27). The more innovative the language is, the more eye-catching. Playing with words adds an element of entertainment for the audience to decipher the intended meaning through the use of words and their connections with one's language and culture [10]. This linguistic aspect may have social implications, which is one facet this research attempts to investigate.

Besides mixing Arabic and English as codes, one form of Arabic that is used by Egyptians and includes borrowing from English is "Arabizi", or Arabized English, which is "a newly-developed form of writing among polyglossic Egyptians where they write English in Arabic letters" [11]. It is used in daily interactions, especially those by young people, and since the language employed in the media reflects people's everyday language, Arabizi is used in many real estate billboards that advertise a new compound or another form of real estate property. One of the aims of the present study is to examine the extent to which culture plays a role in the way advertisers use the native language (Arabic), a combination of the native and a foreign language (mainly English), or an adaptation of the native language using English, as strategies to attract potential customers to purchase a unit, or more, in the compound or city that is being advertised.

There are three types of unit identified in multilingual written texts, namely: "(a) grammatical units (e.g. sentences, morphemes), (b) genre-specific units relevant to textual structure and cohesion (e.g. paragraphs, headings) and (c) visual/spatial units (e.g. column, box, frame)" [12]. A unit can be monolingual or bi/multilingual. Different units are likely to be separated by visual space. This research attempts to identify the types of units employed in the sample of Egyptian real estate billboards examined, explain the rationale behind their use, and describe the sociolinguistic implications associated with these units.

II. MULTIMODALITY

The term *multimodal* indicates the integration of different semiotic modes in a given type of discourse, whether spoken or written; "written discourse integrates language with typographic expression and increasingly also with illustration, layout, and color" [13]. In focusing on the shared, as well as different, characteristics of semiotic modes, and how they are incorporated in various texts and communicative events, multimodality makes use of ideas from discourse analysis and other disciplines like design and art theory. The use of digital photography and video recording of human interaction, a standard practice in qualitative research, has increased interest in multimodality as a means of communication [14].

Ref. [15] asserts that the primary objective of multimodality lies in dealing with a text as a "complete and coherent semiotic entity which aims at describing and analyzing what "goes on" in a text". It also states that every "choice of a signifier in each of the modes (colour, font, lettering, [and] drawing) points to a decision made about an apt match of 'what to be meant' with 'what can best express that meaning' The tools employed in expressing an idea verbally or visually impact the message conveyed. Kress and van Leeuwen state that while, in using language, people choose words and sentence structures, in visual communication, the same may be expressed choosing between different colors or "compositional structures" [16]. They further state that "the way some things can… be 'said' either visually or verbally, others only visually, again others only verbally, is … culturally and historically specified". The present study also explores how the use of visuals may attract the attention of passers-by, probably convincing them of the value/importance of owning a unit in the advertised property, hence enticing them to purchase.

III. BILINGUALISM

There are two types of bilingualism as used in schools and/or public space, namely *separate* and *flexible* bilingualism. Ref. [17] maintains that using the native language in the classroom while communicating in other languages after class may be considered separate bilingualism. On the other hand, communicating in any language to attain educational goals can be described as flexible bilingualism. In everyday life, they claim, we can see inter-sentential code-switching, depending on the situation, which is similar to separate bilingualism, and substantial use of code-switching intra-sententially or within the same situation, which is a reflection of flexible bilingualism. The idea, according to Ref. [17], is that these examples could be applied to written discourse, not only oral communication. The present study aims to examine, among other aspects, the extent to which real estate billboards in Egypt employ separate and/or flexible bilingualism, in their attempt to attract potential customers.

IV. LINGUISTIC LANDSCAPE

The idea of Linguistic Landscape has been extensively examined in the field of linguistics, with a view to identifying strategies and tactics that public signage employs in different parts of the world to attract viewers, usually potential customers, to buy property, enroll children in a particular school/university, or use a particular service, often medical or legal. Ref. [2] states that "The language of public road signs, advertising billboards, street names, place names, commercial shop signs and public signs on public buildings

combines to form the linguistic landscape of a given territory, region or urban agglomeration". Authors adopting this definition of linguistic landscape are interested in how written language is used in public, how "visible" this language is in a particular area. The term "Linguistic Cityscape" could be used instead of Linguistic Landscape if studies examine the linguistic landscape of cities [18].

There are certain points that should be taken into consideration when examining multimodal texts in relation to linguistic landscape. One such point is the extent to which the texts under investigation are representative of the total number of such texts. Research on linguistic landscape found correlations "between the Linguistic Landscape factor and degree of in-group language use… suggesting a 'carryover effect" of the linguistic landscape on language behavior [2]. This suggests a similarity in the way language is used in both contexts. It also maintains that public signs, whether unilingual, bilingual, or multilingual, reflect the status or power of a particular group in relation to others. Bilingual signs may have the language of the dominant group appearing more clearly than the language of the weaker group. Yet, the dominant language may belong to a dominant minority, not necessarily a group that represents the majority of the population [2]. Some billboards employ English as the main code, believing that this gives them prestige and targets potential customers belonging to higher social classes [19]. The present researcher noticed that *all* real estate billboards on the Egyptian North Coast, in summer 2021, used *only* English as the code to address passersby.

Since the field of Linguistic Landscape has been increasing rapidly, its definition has widened, moving from the rather general definition of "the use of language in its written form in the public sphere" [18] to include components contributing to the semiotic aspects of the LL, such as clothes, pictures, sounds, movements, buildings and other multimodal aspects [20]. This multimodal expansion is evident in the definition provided by Ref. [21], which states that the concept reflects "... the presence, representation, meanings and interpretation of languages displayed in public places..."

Ref [22] in fact argues that overlooking these multimodal influences will result in an inaccurate interpretation of the written texts.

V. Literature Review

This section of the paper reviews relevant research in the area of multimodality in relation to billboards that market real estate property and other related topics. The studies cited cover research conducted from 2010 to date. The research is based on different frameworks: Landry and Bourhis's framework of linguistic landscape [23], Fairclough and Wodak's framework of critical discourse analysis [22], as well as Kress and van Leeuwen [24].

The author of Ref. [25] investigated the advertisements of a campaign by the well-known oil company Total in 2005. She analyzed the connection between the verbal and the visual components used in the ads of that campaign. Sheclaims that combining the two modes, image and words, creates an unclear message that is open to different interpretations. Four print advertisements were analyzed, depending on Fairclough and Wodak's framework of critical

discourse analysis [22]. The study found that the logic of showing (visual) and that of telling (verbal) are intertwined in order to convey an unambiguous message, the aim of which is to find a solution to the energy problem for the good of humanity. The study thus highlights the importance of multimodality in advertising campaigns.

Similarly, the authors of Ref [26] investigated the use of multimodality in cigarette advertisements in Indonesia. They collected six ads through doing a Google search related to the well-known Indonesian cigarette company A Mild on Billboards. They used description and interpretation phases. In the first phase semiotic resources and the way they were organized were identified, while in the interpretation phase, they linked all these resources, including visuals, words, color, font and the way these resources were positioned. The researchers concluded that the company has successfully made use of different semiotic modes to convince potential customers to buy its product. There is no connection between the images displayed and cigarette smoking. However, a closer look reveals that the advertisement aims at selling cigarettes implicitly. The tagline, slogan and images appear bigger and colorful. This makes the message conveyed by these tools more notable than the message in the warning label. This is also strengthened by the size gap between the tagline and the warning message.

In another way, still related to multimodality, the way billboards, as an outside form of advertising, enhance the cultural identity and values of Malaysians, has been investigated [24]. The researchers used semiotic methodology in examining 11 billboards with a view to understanding the relationship between the verbal and the visual in communicating messages to the public. Their findings indicate that billboards, besides conveying pro-social messages, mirror the elements that contribute to nation-building, namely language, social identity and the Malaysian values that the citizens live by. The authors concluded that the Malaysian government uses billboards to enhance the feeling of unity among people from different ethnicities.

Focusing on the use of English in Ethiopian linguistic landscape, Ref. [19] examined the signs located in the industrial city of Addis Ababa. The authors focused on "cloning" international brands, using English in the Linguistic Landscape of the city. They adopted Landry and Bourhis' framework of linguistic landscape [2]. They found that the citizens consider the use of English and international brand names as a sign of status. Mobility is looked at as "covering not only geographical movement but also movement on a social scale". They concluded that using English reflects prestige, power, and development.

In another multimodal study, Ref. [1] examined the way Egyptian social identity is reflected in billboards advertising five different types of products/services, with real estate buildings/compounds being one of those products. The author used linguistic landscape and multimodality frameworks to analyse her data (70 billboards). She found that in using different codes such as English, Egyptian colloquial Arabic, Modern Standard Arabic, as well as Arabizi or Arabised English, advertisers employ several discursive strategies like presupposition, parallelism, and intertextuality to persuade potential customers of the validity

of their advertisements, and as a result the importance of purchasing the product advertised. Her findings also indicate that the choice of the code depends to a large extent on the area/neighbourhood where the billboards are located.

In yet another study focusing on the use of more than one code in advertising, the authors of Ref. [27] examined Arabic and Hebrew as used in Israeli road signs. Their aim was to investigate how the use of different codes reflects the power of one identify over another. They examined the visual and linguistic representations of Arabic and Hebrew toponyms of 115 road signs physically, structurally, and semiotically. Their findings showed that Isreali signs disregarded Palestinians' representations. They are put in a clearer way, more dominant than the Arabic representations, which have become distorted and "spatially suppressed".

Another study examined the use of codeswitching between English and Indonesian in 114 billboards in Indonesia [28]. The author used linguistic landscape to analyse the codes used in the billboards, and then questionnaires and interviews were employed. Her conclusions indicate that English is a fundamental code used in Indonesian billboards, and it is more connected with young people and a modern lifestyle.

In another Asian context, Ref. [10] explored the use of Hinglish, or code mixing in Indian billboards that advertise Amul, an Indian butter brand. They found that 45% of the ads used Hindi as the matrix language, 53% used English, while 2% only used a combination of the two languages. Mixing took place on the levels of the words, the phrase and the clause. The authors concluded that the play with words adds an element of enjoyment for customers who try to decipher the intended meaning behind the linguistic and cultural associations used.

Unlike the studies reviewed above, which focused on analyzing visual and textual aspects of signs mostly advertised during the past decade, Ref. [29] examined the linguistic features employed in a collection of digitized 19th century theater posters (available on the website of the National Library of Scotland) in order to investigate the characteristics that made the texts persuasive for the viewers, which contributed to promotional purposes. She used multimodality and appraisal theories to address her research question. She assumed that using the two approaches could show some strategies that were used at the time and which may be taken for granted these days. She found that theater posters during the period under investigation relied on cognitive and affective processes, paralinguistic and extralinguistic features, e.g. using visuals, selecting typeface and the poster layout in order to make the theater posters appealing and "memorable".

The studies reviewed above share a few similarities, but there are differences in terms of the products advertised, the strategies used, as well as the findings and conclusions reached by the researchers. While the products included oil, cigarettes, butter, and theater posters, the majority advertised residential units. Multimodality and linguistic landscape were the two main theoretical frames employed in analyzing the data. The focus in almost all the studies was the (mixing of) codes used in the billboards. Visual and textual aspects of the signs examined were the core of the studies. While Refs [25] and [26] found that the verbal and visual elements combine to enhance the message conveyed, Ref. [24] concluded that billboards enhance the feeling of cultural identity of people belonging to different ethnicities. Refs. [19] and [27] found that the use of one code rather than another is a sign of power and prestige; at the same time [27] concluded that the decision as to which code to use depends to a large extent on

the neighborhood where the billboard is displayed. Interestingly, [28] concluded that the use of English is more connected to young people and a modern life style, and Ref. [10] found that playing with words adds an element of enjoyment for the viewers who try to understand the meaning behind the cultural and linguistic associations used in the billboards. Despite the similarities identified in the methodologies employed in analyzing the data and sometimes the findings related to the multimodal strategies and the purpose for using them, there are differences in the nature of the advertising samples used and the implications of the different studies.

A. Research Gap and Research Questions

As far as the review above is concerned, no previous research has explored the use of code mixing in Egyptian real estate billboards. More specifically, the mixing of English and Arabic, or varieties of them, as the two languages most commonly used in Egypt, has not been investigated in research dealing with multimodality. Moreover, the research examining billboards has dealt with single billboards. This research, therefore, attempts to explore this area, focusing on the following two research questions:

1. What are the multimodal strategies real estate advertisers employ in Egyptian real estate double billboards to attract potential customers?
2. How is code mixing manifested in such billboards?

V. METHODOLOGY

The sample used in this paper includes 10 double billboards; eight of the billboards were originally photographed on Egyptian main routes between 2018 and 2020. The problem was that sometimes the content of the billboards was not clearly shown because of the fact that the researcher was either driving or riding a vehicle at the time of taking the photos. This caused some of the boards to appear blurry or to be obstructed by a vehicle, a tree, or another billboard that made the original one rather unclear. Trying to have clearer versions, the researcher googled the names of the residential units advertised online. Interestingly, many of them advertised the real estate in the form of a double billboard. This gave the researcher the idea of focusing her research on double billboards rather than single ones, especially when she noticed that multimodality is obvious in double billboards, employing text, visuals, color, and different codes, in order to attract potential consumers to purchase a unit in the advertised residential complex. Two double billboards were added to the body of boards already gathered, therefore ending with a total of 10.

VI. ANALYSIS

This part of the paper focuses on analyzing the multimodal aspects of the 10 double billboards under investigation. The

analysis includes both textual and visual components.

Fig. 1. (a & b) Go Heliopolis double billboard.

In Fig. 1, Khozam advertise Go Heliopolis units, which include three types: commercial, administrative, and clinical.

Interestingly, it states that Go Heliopolis is the first residential compound in Heliopolis, yet the same billboard, one line above, states the three types of units, not including the residential one.

Under the name of the compound which is written in large font, there is a sub-heading, "infinite your living", typed in a very small font size. There is a probable allusion to the novel *The Living Infinite* by Chantel Acevedo, which was published in 2017 and is built around the true story of the Spanish Princess, Eulaia, who, after a protected childhood in Spain, leaves to the US, seeking independence and a different experience [30]. At the bottom left side of the billboard, the company's hotline number is given, as well as the company's website, in smaller font.

Billboard b has the same blue tone as billboard a, showing the interior of one of the units, mainly a company, a spacious office, an open area, not cubicles; employees, if at their desks, will see each other. As well as the light coming through the glass windows, there are seven spotlights, all giving the impression of a very well-lit working area. The words عنوان شركتك, your company's address, are written in a very big font size, enticing businesses to own an area to become their office location.

The only word written in English is the name of the compound – in the top center of the billboard. The way the two letters of the word, the G and the O, are written reflects the circular shape of the logo of the real estate taking the shape of a wheel, indicating continuity.

Unlike other billboards advertising the same compound which employ the same background color to the double billboard, the two parts of this double billboard have the same background, black, and there is no visual, only text. The top billboard has almost the same information as Billboard (1a) above. The difference is that the word "residential" has been added to the list of three unit types identified in Billboard (1a). Also, the unit types come after the phrase "The first

compound in Heliopolis". The other difference is that the company's hotline, 19791, and the name and logo of the real estate company, KHOZAM, take each other's place. In 1a & b, the hotline is on the bottom left side while it is placed on the right in Fig. 2a & b.

Fig. 2. (a & b) Go Heliopolis Double Billboard

Fig. 2b is divided in two sides, vertically. The left side states payment facilities that would cover six years. This side of the billboard has the name and logo of the real estate company while in 2b it has the hotline number. The right-hand side of the billboard states that down payment begins at 5% of the total unit price. The figures are put in the largest font, and the name of the developer, Khozam, and its credentials are put on the left and right sides of the two billboards.

Billboard 3a advertises Privado, a gated community in Madinaty, New Cairo. The billboard does not show the name of the compound; the name is rather in 3b. 3a focuses on the payment system. On the left we see the words "SMART Pay" and on the right the words "نظام تقسيط جديد" (a new installment system) appear in Arabic. In the center of the billboard, the viewers see that installments are paid over 10 years. Underneath, viewers are informed that this new system of installments comes from مجموعة طلعت مصطفى, Talaat Mostafa Group (TMG).

The bottom of Fig. 3a has two sides; on the left side there is the logo of the company that looks like a Pyramid showing the name طلعت مصطفى, next to the alphabetic abbreviation TMG, which stands for Talaat Mostafa Group, the name of the development company. On the bottom right side of the Billboard we see the sign of a phone and the hotline number of the company, in Hindu Arabic numeral, 19691.

Fig. 3b features the name of the gated community, PRIVADO, meaning private or personal, which connotes the privacy residents would enjoy in this community. A reflection of this name, including an explanation, is given in Arabic opposite the name. The explanation says امتلك الخصوصية في قلب مدينة متكاملة, the literal translation of which is "Own privacy in the heart of a complete city." The rest of the

billboard, which is the major part, is a visual that shows several buildings in the gated community, all overlooking a big lake, green areas, and a road where a few people are taking a walk.

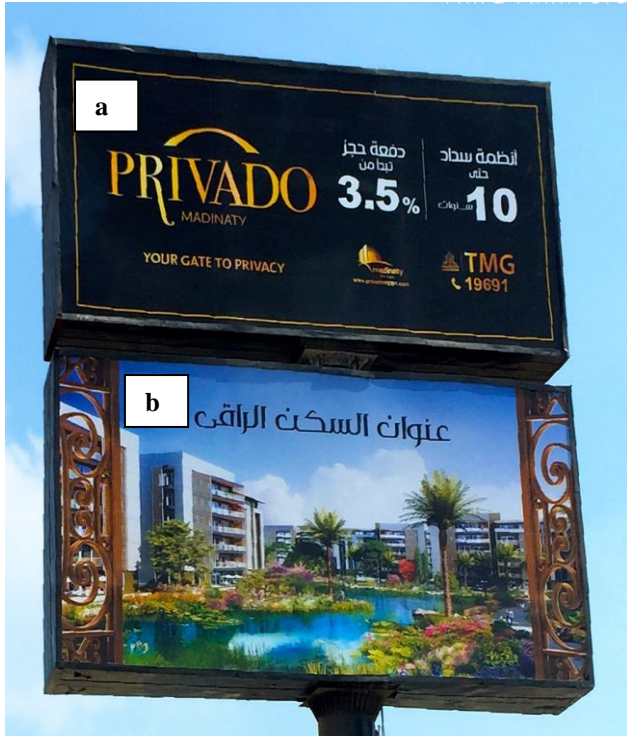Fig. 3. (a & b) Privado double billboard.

Fig. 4. (a & b) Privado Double Billboard.

Billboard Fig. 4a, similar to Fig. 3a, has a black background with a text written in white and gold. The difference, however, is in the color of the text showing the number of years covering the installments, stating there are systems reaching 10 years, and the down payment starts at 3.5%. These two pieces of information are located on the right hand side of the billboard, in a font clear enough to be visible by passersby. The rest of the billboard, the major part, is written in gold, showing the name of the gated community in the biggest font, underneath, in much smaller font, the word MADINATY is written. Fig. 3b features an open gate that overlooks the city view, showing several white buildings facing the viewers, with a lot of green areas that surround a lake, with the reflection of the sky on the lake. The colors are bright, and in the middle of the upper part of the billboard the words عنوان السكن الراقي – upscale residential address - are written. The authors of Ref. [16] state that "as with linguistic modality, visuals can be of high modality or low modality". High modality means that items in visuals, whether things or people, seem 'realistic', i.e. as if they were seen in real life.

Fig. 5. (a & b) Anakaji Double Billboard.

Double Billboard Fig. 5 (a & b) advertises Anakaji, a residential compound in the New Capital, Greater Cairo. The visual of the double billboard shows that the bottom billboard is a continuation of the first one, but probably because of lack of space they were divided into two. The word ANAKAJI features in the top billboard, in big capital letters, using calligraphy in an expressive and skillful way. Anakaji means "my home" in Nubian. Nubia, not Nuba, is located along the area extending from south of Aswan, Upper Egypt, and Khartoum in Central Sudan. The letter A has the shape of a western house, with the roof in a triangular shape. There are three as in the word ANAKAJI. The letter N has the shape of a house in different rural Egyptian areas, with a semi-circular roof. Half of the semi-circle is presented in a much bigger shape, with a small part in the upper billboard and the bigger part in the bottom one. Immediately underneath the name of the compound, the location is given, the New Capital. The text of this top billboard is written in English script. The bottom billboard is written in Arabic, without the name of the compound. There is a big visual of the compound on the right, with the slogan, in Arabic, on the left بيوت ع الدنيا طلة, meaning "houses overlooking the world". The colors surrounding the buildings are taken from nature, blue representing the sky and lagoon, green reflecting trees and plants, and white in the shape of little birds hovering in the sky.

Fig. 6 above features Anakaji Double Billboard, which combines both English and Arabic script. The English comes on top while the Arabic is in the bottom half of the top billboard, appearing in one line. It is the same catchphrase that appears in all other ANAKAJI Arabic billboards, stating بيوت ع الدنيا طلة, meaning "houses overlooking the world".

Fig. 6. (a & b) Anakaji Double Billboard

Unlike Fig. 5b, Fig. 6b has two pieces of information, significant to those interested in purchasing a residential unit: 0% Down Payment on the left, and "UP TO 10 YEARS installment" on the right-hand side. The numbers are put in the largest font for better viewership, and in order to entice passersby to continue reading. There is a combination of capital and small letters, all in white; the phrase UP TO 10 YEARS is all capitalized, while the word "Installment" begins with a capital letter and the rest of the word is in small letters. The words "Down Payment" begin with capital letters as well. The double billboard is displayed in strikingly bright colors, blue, red, and yellow, among others, giving the impression of energy, power, seriousness, freshness, and happiness (Baker, n.d.). This is the only double billboard being studied with so many colors.
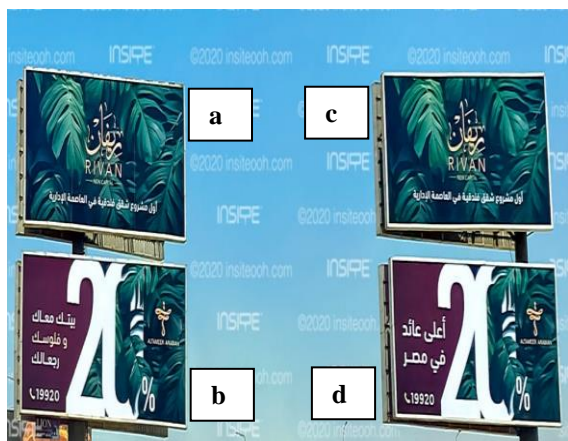

Fig. 7. (a, b, c, & d) Rivan double billboard.

Billboard Fig. 7 (a&b) advertises the compound Rivan, in the Administrative Capital City. The billboard is put on the right (Fig. 7 (a&b)) and left (Fig. 7 (c&d)) sides of a main route in Greater Cairo, with the top one being the same in each billboard, and the bottom one showing exactly the same thing, except for the text written on the left. The word "Rivan" is of Indian origin; it; it "has the meanings of Horse rider, A star, Interesting, Ambitious, Self Sufficient, A star brilliant like the Sun" (TamilPedia.net).

The top board (Fig. 7 a) has the name of the compound,

written in Arabic, in the middle of the billboard, followed by English immediately underneath. Also in Arabic is the phrase أول مشروع شقق فندقية في العاصمة الإدارية, the first serviced apartments in the Administrative City. The left-side of the lower billboard is divided vertically into three sections, clearly shown in the colors of the background: The left side in the first one has the phrase بيتك معاك وفلوسك راجعالك, meaning *you have your home and you are getting your money back*. The middle part shows, in the biggest font size, the percentage of the interest rate, 20%, however the percentage sign (%) is in the third section of the billboard, which has the name and logo of the real estate company. The lower billboard on the right-hand side (Fig. 7d) is a copy of the one on the left side, but the text on the far left side states أعلى عائد في مصر, meaning *the highest interest rate in Egypt*, referring to the 20%. The company's hotline number is on the bottom left side of both billboards (Fig. 7b &d). Green is the dominant color in all billboards, which reflects nature. Green, according to Baker (n.d.) "means safety; it is the color of free passage in road traffic". The color burgundy, which clearly shows in the left side of billboards b and d, in the psychology of color, indicates "high status, prestigious, elegant, luxurious, determined, ambitious, sophisticated and confidence" [31]. The combination of the two colors, green and burgundy, in the billboards, gives a sense of both serenity and prestige, targeted by many people belonging to a high socioeconomic class.

Fig. 8. (a & b). Rivan double billboard.

Billboard Fig. 8a has the same info as Fig. 7a; however, the background, solid burgundy, shows clearly against the information about the compound in white. There are also thin geometrical lines in white. Fig. 8b is divided into two sections, vertically. The left-hand side has a visual that takes up two thirds of the size of the billboard, while the right side has the text "عائد ٢٠٪ على أقساطك في السنة", meaning "an annual interest rate of 20% on your installments", followed by the real estate company's hot line number and the name and logo of the company. There are also a few, fainted, white lines that reflect the geometrical lines in Fig. 8a. The visual on the left displays facades of several buildings, with many lit units, the dominant colors being light blue and white, reflecting the color of the clear sky above the buildings. The picture gives

the impression of serenity, quiet, and peace. The idea about serviced apartments shown in the upper billboard will make viewers visualize the units from the inside, being clean and well maintained, enticing them all the more to purchase a unit, if interested.

Fig. 9. (a & b) La mirada billboard.

Billboard Fig. 9 (a & b) advertises LA MIRADA, a compound in Mostakbal (Future) City. La Mirada is both a word in Spanish, meaning "the look" or "the gaze" and it is also the name of a city in Los Angeles, South California, the USA. The two parts include both a text and a visual. 9a is divided into two sections, vertically, with the left side taking almost two thirds of the billboard, while the right side has a visual of buildings in the compound as well as part of the landscape. The left side has a dark purple background with a white text showing the name of the compound, LA MIRADA, all in capital letters, with the sub-name, Al Mostakbal, in Arabizi, immediately underneath. This is the only part in the double billboard that has an "Arabic" element to it, even though the word is written in English orthography.

Billboard Fig. 9b has the same colors of Fig. 9a, with purple being the dominating color. Purple is associated with "royalty, wisdom and respect" [32]. So, an association with making a wise decision by owning a unit in the city of the future is probably what was on the advertiser's mind when they selected purple to dominate the billboard. The same color is also used in double billboard Fig. 10 below.

Billboard Fig. 10 (a&b) is the second in the list that advertises LA MIRADA in Mostakbal City. The text in 10a is in English while Fig. 10b is all in Arabic. The background in Fig. 10a is purple, lighter than the color in Fig. 9, and the text is in white. In the center of the upper part is the name "LA MIRADA" in the biggest font, all capitalized, immediately followed by "EL MOSTAKBAL", also capitalized but in a smaller font size. The bottom section of the billboard has two parts; on the left-hand side is the company's hotline number, in bold, and the location of the compound, NEW CAIRO,

capitalized but not bolded. The right-hand side has the name GRAND PLAZA, in capital letters, with an illegible text above and underneath it. The text on the extreme right side also has an illegible text that shows from under the whole billboard, as if the page of a book is about to be folded.

Fig. 10. (a & b) La Mirada double billboard.

The left side of the lower billboard has a picture in a frame, that of a little girl sitting on a swing and looking forward to something on the right side of the billboard, reflecting the idea of the city of the future, Mostakbal City, which is written on the right side. The girl has green plants in the background, indicating hope and fertility. A picture like this entices parents of small children to buy a unit in La Mirada, thinking that this is where a good future, associated with all types of positivity lies ahead.

VII. Discussion and Conclusion

This section of the paper identifies similarities and differences between the billboards under investigation, and draws connections with similar previous research. This is through an examination of the strategies employed in the double billboards and what they signify in an Egyptian context. It also attempts to reach concluding remarks through answering the research questions under investigation.

A. Strategies

There are several discursive strategies that real estate developers employ in order to attract potential customers to purchase units in the advertised gated communities under investigation. The discussion will focus on the codes used in the billboards, presupposition, and dialogicality as means to attract potential customers to purchase units in the residential compounds advertised.

B. Codes

The ten double billboards examined all use two codes, mainly Arabic and English; sometimes another code is used in the name of the residential compound itself, namely Spanish in two cases (Privado and La Mirada), Indian in one (Rivan), and Nubian in another (Anakaji). The use of foreign names, especially ones that would not be understood by the majority of the locals belonging to lower socio-economic classes, in referring to real estate units located in the Egyptian society reflects the extent to which real estate developers and advertisers of such units target a particular segment of the society, mainly people who can afford the expenses of gated communities. It is easy for people of middle and higher social classes to look up what a word in a foreign language means, if they are not familiar with the word, or if they care enough to

know. It is also plausible that developers may want to attract non-local residents to purchase a unit in the advertised product. The goal is to attract foreign investment.

Table I shows frequency count of the number of Arabic words in the 10 billboards vs. the number of foreign words, basically English for the information given about the residential compound and Spanish in the names of two compounds and Nubian in one.

TABLE I: FREQUENCY COUNT: ARABIC VS. FOREIGN CODES

#	Gated community	Code	
		Arabic	Non-Arabic
1 (a)	Go Heliopolis	11	6
1 (b)	Go Heliopolis	2	4
2 (a)	Go Heliopolis	9	8
2 (b)	Go Heliopolis	6	5
3 (a)	Privado	8	5
3 (b)	Privado	6	1
4 (a)	Privado	8	11
4 (b)	Privado	3	0
5 (a)	Anakaji	0	4
5 (b)	Anakaji	4	2
6 (a)	Anakaji	4	6
6 (b)	Anakaji	0	9
7 (a)	Rivan	8	2
7 (b)	Rivan	4	4
8 (a)	Rivan	8	3
8 (b)	Rivan	6	3
9 (a)	La Mirada	0	4
9 (b)	La Mirada	0	7
10 (a)	La Mirada	0	8
10 (b)	La Mirada	6	0
Total	Ten double billboards	93	92

As the table indicates, the two codes are almost equal in number in the 10 double billboards, with variation within the same double billboard; sometimes there is only Arabic in a single billboard and on more occasions only a non-Arabic code is used. The non-Arabic code is English in the information given, Spanish in the names of two residential compounds, and Nubian in one. This suggests the influence of foreign languages in an Egyptian context; it also implies that developers have a particular socio-economic segment of the Egyptian society that should own a unit in the advertised product, mainly those who can understand or communicate in English as a foreign language as well as Arabic. The use of multiple codes has also been identified in several of the studies in this paper [10], [19], [22], [24], [1], [27], [28].

C. Color

The combination of colors used in the different billboards reflects careful attention to the impact intended to be left on the viewers. Green, blue, and purple are employed in most of the billboards, at least in one of the double billboards, often the one that has the visual. The three colors are "the colors of night, of water, of nature, and are usually calming, relaxing, and somewhat reserved" [23]. Even though viewers may not be aware of these associations, web designers who employed these colors in the billboards are cognizant of these relationships and the impact these colors will most probably have on potential customers. The shade of blue used in an advertisement has a particular impact rather than another. Ref. [23] states that light blue gives the impression of relaxation and calm, while light blue is associated with energy and refreshingness, and dark blue is used in designs "where strength and reliability are important".

Even though black is generally associated with mourning and death, in advertising it is also associated with power and elegance and has a calming impact on the mood [33].

D. Presupposition

Presupposition is another strategy employed by the real estate advertisers in order to attract potential consumers. In Figure 1b, there is the presupposition that the viewer has a company "your company's address". Also, the phrase أول كمبوند سكني في مصرالجديدة, the first residential compound in Heliopolis, presupposes the non-existence of compounds up until Go Heliopolis began to be constructed. A similar presupposition is expressed in Fig. 7 (a & c) and Fig. 8 (a) where the words أول مشروع شقق فندقية في العاصمة الادارية, the first project of serviced apartments in the Administrative Capital presupposes the non-existence of such units until Rivan has been established. This may entice some potential customers to own a unit in this location, in order to be among the first to enjoy this service. The words أعلى عائد في مصر, the highest revenue in Egypt, presupposes the existence of revenues given by other establishments; however, they are not as high as those given to those who intend to own a unit in Rivan. Again, the words على أقساطك, on your installments, presupposes the existence of installments that are being paid and customers will gain a 20% interest rate. Also, فلوسك راجعالك, you are taking your money back, presupposes that your money has been taken away from you. These presuppositions give viewers a positive impression about the compound, enticing them all the more to purchase a unit, or perhaps more. Also, in Figure 10b about La Mirada, the words حلم اتحقق وحلم بيقرب, a dream has been fulfilled and another is about to be fulfilled, presuppose that people have dreamed of something, which is the establishment of La Mirada. With the picture of the little girl, the viewer has the impression that the dream that has been fulfilled is the girl's family owning a unit in the residential compound, while the dream to be fulfilled is for the girl herself being an owner/resident in El Mostakbal, the City of the Future. The word El Mostakbal itself presupposes the existence of a past and a present. The present is the point from where potential customers are supposed to look forward to a wonderful life in the future.

E. Dialogicality

Dialogicality refers to a text that has the nature of a dialogue or conversation between two people. In the ten billboards under study, there are several cases of dialogicality, however from one side, that of the real estate provider. The first case is in billboard 1b in the word شركتك, your company. Here the advertiser addresses potential customers by making them feel this is already their own company, and the residential compound, Go Heliopolis, is the address of *the addressee's* company. This casual tone supposedly entices

the viewer to become interested in purchasing a unit in the compound. The second instance of dialogicality is in billboard 3b, with the directive امتلك الخصوصية في قلب مدينة متكاملة, meaning "Own privacy in the heart of a complete city." Privacy is portrayed as something tangible to be owned. The use of a direct directive gives the impression that the directive is coming from an authority; no hedges or mitigation strategies are employed, hence the importance of the directive. Not only is there going to be privacy, but this privacy is in the middle of a city that has all utilities, alluded to in مدينة متكاملة, a complete city. The existence of utilities usually has the connotation of being in a busy place with a lot of noise and distraction. Despite this, the billboard promises privacy, with quiet and peace associated with it. The same idea is reflected in billboard 4a, still advertising Privado, when the board states, in English, your gate to privacy. Here, the compound is portrayed as a gate that opens to a place that enjoys privacy as a privilege that many other places lack.

The third instance of dialogicality is seen in billboards 7b and d, where it is stated بيتك معاك وفلوسك راجعالك, meaning *you have your home and you are getting your money back*. The four words بيتك معاك وفلوسك راجعالك end in the /k/, ك used to address a male person, of course with the understanding that the addressee could also be a female, not only a male. Since in the Egyptian culture men are supposed to be the breadwinners, the ones who normally afford the family expenses, they are the addressee in the billboard. The goal of the statement is to convince the viewers to purchase a unit in Rivan, with the two advantages of having a home and earning money.

The examples of one-way dialogicality in the billboards reflect a certain level of familiarity between the real estate developers and potential customers, urging them to become owners/residents in the gated communities advertised. Through showing the privileges offered to those interested, usually material, it is hoped that they would be motivated to purchase a unit, or more, probably taking advantage of the offers given.

VIII. LIMITATIONS

There are certain limitations associated with the present study. The first of these limitations has to do with the number of billboards being investigated, namely ten. Even though they are double billboards, i.e. the actual number of billboards was 22, basically because Figure 7 combines two double billboards, this number is not enough to generalize the strategies employed to the total number of real estate billboards employed in the study. Another limitation is concerned with the nature of the codes used. The study focused on the strategies billboards that used two codes employed. It is not certain that billboards with one code only, either Arabic or English, used the same or different strategies. Another limitation is the location where the billboards were installed at the time the data was collected. The study examined billboards on Cairene highways; examining billboards displayed on other routes would have yielded more generalizable results. Perhaps future research can address the limitations of this study by focusing on one or another aspect of the ones stated here.

IX. CONCLUDING REMARKS

The present research attempted to broaden the understanding of multimodality by answering two main research questions. The first question concerned the multimodal strategies employed in Egyptian real estate billboards. The study identified several strategies, including Arabic and English as codes that are used almost equally, various colors to impact the viewers in one way or another, presupposition for conciseness purposes since the number of words displayed on the billboard is limited, as well as dialogicality to make the billboards interactive in nature; even if the interaction is one-sided, a response is expected in the form of being enticed to purchase a unit in the advertised gated community. The second research question dealt with how code mixing is manifested in the billboards. The research found that the total number of Arabic and English words used in the billboards is almost the same. It cannot be said, therefore, that English is the matrix language here. However, the use of English so frequently corroborates the idea that these billboards target high socio-economic levels of the Egyptian society. It may even suggest that there is a change in the fabric of the identity of the Egyptian society. These results advocate for advertisers to bear the audience in mind when they use multiple codes. They also suggest that instructors address multimodality when examining visuals similar to the ones investigated in this study

CONFLICT OF INTEREST

The author declares no conflict of interest.

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